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Dated: 4/22/04 Signature: (David J. Powsner)

Docket No.: 103695-0002  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Christine M. Rankovic

Application No.: 10/719,577

Confirmation No.:

Filed: November 21, 2003

Art Unit: N/A

For: METHODS AND APPARATUS FOR  
MAXIMIZING SPEECH INTELLIGIBILITY  
IN QUIET OR NOISY BACKGROUNDS

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT (IDS)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the publications listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the publications be made of record therein and appear among the "Publications Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

A copy of each reference on the PTO/SB/08 is attached.

A concise explanation of relevance of the items listed on form PTO/SB/08 is given for only non-English language listed items.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this

Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed publications.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 141449, under Order No. 103695-0002. A duplicate copy of this paper is enclosed.

Dated: 4/22/04

Respectfully submitted,

By 

David J. Powsner

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PTO/SB/21 (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)		Application Number	10/719,577-Conf. #3261
		Filing Date	November 21, 2003
		First Named Inventor	Christine M. Rankovic
		Art Unit	N/A
		Examiner Name	Not Yet Assigned
Total Number of Pages in This Submission	1	Attorney Docket Number	103695-0002

**ENCLOSURES (Check all that apply)**

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
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<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		
<b>Remarks</b>		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	NUTTER MCCLENNEN & FISH LLP David J. Rowsner
Signature	
Date	4/22/04

**Transmittal**

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Application No. (if known): 10/719,577

Attorney Docket No.: 103695-0002

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IDS (Citation) by Applicant

Copies of 8 documents referred to  
on PTO-1449

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PTO/SB/08a/b (08-03)

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<b>Substitute for form 1449A/B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete If Known</b>	
				Application Number	10/719,577-Conf. #3261
				Filing Date	November 21, 2003
				First Named Inventor	Christine M. Rankovic
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	103695-0002

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	ANSI S3.5-1997. Methods for calculation of the speech intelligibility index. American Nation Standards Institute, Inc., New York, NY. (34 pages)	
	CB	Fletcher, H. (1954). Hearing aid design for selective fitting. Audicibel 3:6 (November/December), pp.11-13, 15.	
	CC	Fletcher, H. (1952). The perception of speech sounds by deafened persons. Journal of the Acoustical Society of America 24, pp.490-497.	
	CD	Fletcher, H. and Galt, R.H. (1950). The perception of speech and its relation to telephony. Journal of the Acoustical Society of America 22, pp.89-151.	
	CE	Ludvigsen, C. (1985). Relations among some psychoacoustic parameters in normal and cochlearly impaired listeners. Journal of the Acoustical Society of America 78, pp.1271-1280.	
	CF	Moore, B.C.J. and Glasberg, B.R. (1997). A model of loudness perception applied to cochlear hearing loss. Auditory Neuroscience 3, pp.289-311.	
	CG	Rankovic, C.M. (1997). Prediction of speech reception for listeners with sensorineural hearing loss. In W. Jesteadt (ed.) Modeling Sensorineural Hearing Loss, pp.421-431, Lawrence Erlbaum Associates, Mahwah, NJ.	
	CH	Rankovic, C.M., Freyman, R.L., and Zurek, P.M. (1992). Potential benefits of adaptive frequency-gain characteristics for speech reception in noise. Journal of the Acoustical Society of America 91, pp.354-362.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Examiner Signature		Date Considered	
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